

AMENDMENTS TO THE CLAIMS

1. – 12. (Cancelled)

13. (Currently Amended) A method for dispensing fluid for forming a bond between plies of a vehicle interior panel comprising:

providing a reservoir containing an amount of fluid;

providing a spray mechanism for dispensing the fluid from the reservoir;

positioning the fluid within the reservoir at an initial height above the spray mechanism;

operating a controller to determine the initial height of the fluid;

operating the spray mechanism to dispense an amount of the fluid wherein the amount of dispensed fluid is regulated by hydrostatic pressure corresponding to the height of the fluid;

operating the controller to determine a second height of the fluid; and

calculating the amount of fluid used during the dispensing operation.

14. (Original) The method defined in Claim 13 further comprising a valve operatively connected to the controller wherein the valve is positioned between the reservoir and a source of the fluid; and

the valve is operated by the controller to refill the reservoir.

15. (Original) The method defined in Claim 14 wherein the valve is operated by the controller to one of:

refill the reservoir to an amount greater than the initial height of fluid when the amount of fluid dispensed is less than a pre-set amount;

refill the reservoir to an amount less than the initial height of the fluid when the amount of fluid dispensed is greater than the pre-set amount; and

refill the reservoir to the same amount as the initial height of the fluid when the amount of fluid dispensed is equal to the pre-set amount.

16. (Original) The method defined in Claim 13 wherein the initial height of the fluid is checked prior to each dispensing cycle.

17. (Original) The method defined in Claim 13 wherein the controller determines the fluid height based on a density of the fluid, a fluid pressure at the spray mechanism, and a gravitational force constant.

18. (Original) The method defined in Claim 13 wherein the vehicle interior panel is a first vehicle headliner ply having a polyurethane adhesive applied thereto; and

the fluid is a catalyst that interacts with the adhesive to form a bond with a second headliner ply.

19. (Previously Presented) A method for dispensing a fluid for forming a bond between plies of a vehicle panel comprising:

- providing a tube containing an amount of fluid;
- providing a source of fluid for replenishing the fluid in the tube;
- controlling the flow of fluid between the source of fluid and the tube;
- providing a spray mechanism in fluid communication with the tube, the spray mechanism being configured to dispense fluid from the tube;
- providing a controller;
- operating the controller to determine the initial height of fluid in the tube;
- providing a first vehicle panel;
- operating the spray mechanism to dispense an amount of the fluid on the first vehicle interior panel; and
- providing a second vehicle panel substantially aligned with the first vehicle panel to join the panels together.

20. (Previously Presented) The method defined in Claim 19 further comprising the steps of:

operating the controller to determine a second height of the fluid in the tube;
and

calculating the amount of fluid dispensed during the dispensing operation by comparing the initial height of the fluid to the second height of the fluid.

21. (Previously Presented) The method defined in Claim 20 further comprising the step of:

determining whether the desired amount of fluid was dispensed.

22. (Previously Presented) The method defined in Claim 21 further comprising the step of:

refilling the tube from the source to at least one of a same, higher, and lower height than an initial fluid height based on the determination of the amount of fluid dispensed.

23. (New) A method for dispensing fluid onto a surface comprising:
providing a reservoir containing an amount of fluid;
providing a spray mechanism for dispensing the fluid from the reservoir;
positioning the fluid within the reservoir at an initial height above the spray mechanism;
operating a controller to determine the initial height of the fluid;
providing a valve operatively connected to the controller wherein the valve is positioned between the reservoir and a source of the fluid;
operating the spray mechanism to dispense an amount of the fluid;
operating the controller to determine a second height of the fluid;
calculating the amount of fluid used during the dispensing operation; and
operating the valve to refill the reservoir to one of:
-an amount greater than the initial height of fluid when the amount of fluid dispensed is less than a pre-set amount;
-an amount less than the initial height of the fluid when the amount of fluid dispensed is greater than the pre-set amount; and
-the same amount as the initial height of the fluid when the amount of fluid dispensed is equal to the pre-set amount.

24. (New) The method defined in Claim 23 wherein the initial height of the fluid is checked prior to each dispensing cycle.

25. (New) The method defined in Claim 23 wherein the controller determines the fluid height based on a density of the fluid, a fluid pressure at the spray mechanism, and a gravitational force constant.

26. (New) The method defined in Claim 23 wherein the vehicle interior panel is a first vehicle headliner ply having a polyurethane adhesive applied thereto; and the fluid is a catalyst that interacts with the adhesive to form a bond with a second headliner ply.

27. (New) A method for dispensing fluid onto a surface comprising:
providing a reservoir containing an amount of fluid;
providing a spray mechanism for dispensing the fluid from the reservoir;
positioning the fluid within the reservoir at an initial height above the spray mechanism;
operating a controller to determine the initial height of the fluid;
operating the spray mechanism to dispense an amount of the fluid;
operating the controller to determine a second height of the fluid; and
calculating the amount of fluid used during the dispensing operation;
wherein the controller determines the fluid height based on a density of the fluid, a fluid pressure at the spray mechanism, and a gravitational force constant.

28. (New) The method defined in Claim 27 further comprising a valve operatively connected to the controller wherein the valve is positioned between the reservoir and a source of the fluid; and the valve is operated by the controller to refill the reservoir.

29. (New) The method defined in Claim 28 wherein the valve is operated by the controller to one of:

refill the reservoir to an amount greater than the initial height of fluid when the amount of fluid dispensed is less than a pre-set amount;

refill the reservoir to an amount less than the initial height of the fluid when the amount of fluid dispensed is greater than the pre-set amount; and

refill the reservoir to the same amount as the initial height of the fluid when the amount of fluid dispensed is equal to the pre-set amount.

30. (New) A method for dispensing fluid for forming a bond between plies of a vehicle interior panel comprising:

providing a reservoir containing an amount of fluid;

providing a spray mechanism for dispensing the fluid from the reservoir;

positioning the fluid within the reservoir at an initial height above the spray mechanism;

operating a controller to determine the initial height of the fluid;

operating the spray mechanism to dispense an amount of the fluid;

operating the controller to determine a second height of the fluid; and

calculating the amount of fluid used during the dispensing operation;

wherein the vehicle interior panel is a first vehicle headliner ply having a polyurethane adhesive applied thereto, and the fluid is a catalyst that interacts with the adhesive to form a bond with a second headliner ply.

31. (New) The method defined in Claim 30 further comprising a valve operatively connected to the controller wherein the valve is positioned between the reservoir and a source of the fluid; and

the valve is operated by the controller to refill the reservoir.

32. (New) The method defined in Claim 31 wherein the valve is operated by the controller to one of:

refill the reservoir to an amount greater than the initial height of fluid when the amount of fluid dispensed is less than a pre-set amount;

refill the reservoir to an amount less than the initial height of the fluid when the amount of fluid dispensed is greater than the pre-set amount; and

refill the reservoir to the same amount as the initial height of the fluid when the amount of fluid dispensed is equal to the pre-set amount.